

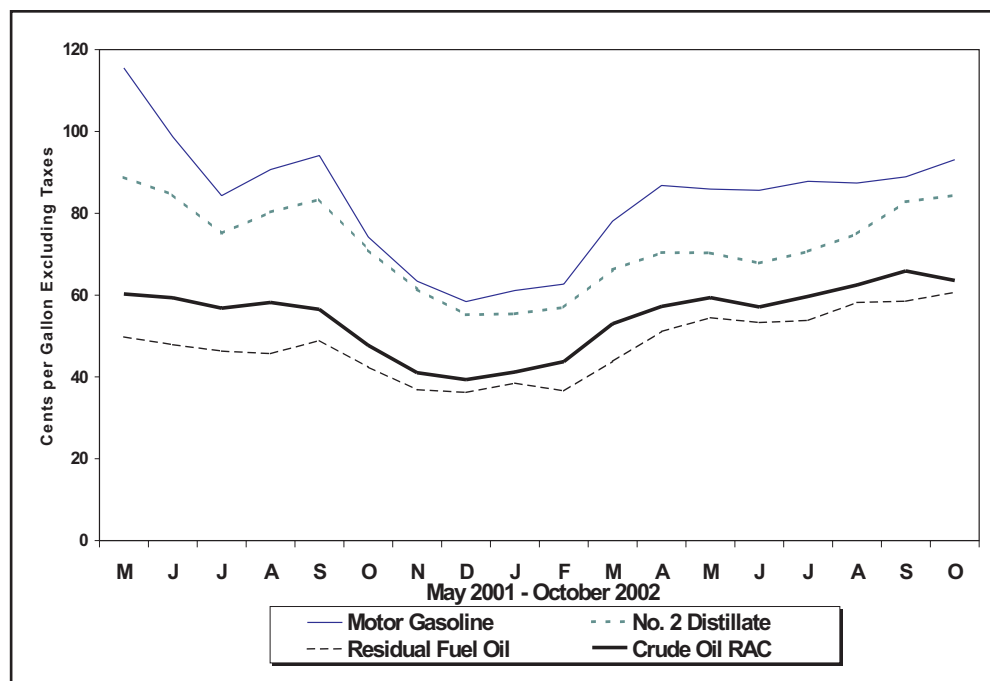
Highlights

Amid lower demand and increased supply, international crude oil prices declined in October. Coupled with reports of continuing production overruns by members of the Organization of Petroleum Exporting Countries (OPEC), scheduled refinery maintenance and run cuts in Northern Hemisphere markets led to lower demand for crude oil, which pressured prices lower. Additionally, a slight abatement in political tensions between the United States and Iraq helped dampen prices. Diplomatic efforts associated with this situation directly influenced the so-called "war premium" the market has attached to crude oil prices. Market observers and participants believe the premium to consist of the costs above the actual fundamental market value of crude oil, based on fears of military conflict in the Middle East. The downward slope of prices was also affected by the departure of severe weather in the Gulf of Mexico that occurred in late September and early October and technical factors in regional mercantile exchange markets.

Following the disruption caused to production, refining, and delivery systems in the Gulf Coast region by Tropical Storm Isidore and Hurricane Lili, crude oil and most finished product prices declined moderately in the United States during October. Resisting the general trend, gasoline prices were volatile throughout regional markets due to solid demand and trimmer supply levels. Lower inventories resulted from both scheduled and unscheduled refinery closures, and delays in deliveries. Refinery closures and reduced pipeline throughputs caused by the storms forced suppliers to allocate gasoline in markets throughout the cen-

tral region of the country. Refinery inputs in PADD 3 (the Gulf Coast region) fell sharply at the end of September through the first half of October. Other unexpected refinery outages in markets across the country exacerbated price increases due to the storm-induced supply shortages. In Chicago, the spot market price for reformulated gasoline, the gasoline formulation required for use in that metropolitan area, rose to \$1.015 on October 14 following news of an outage at a refinery in Ohio. The price was the highest in this market for the year thus far. In some Midwestern markets, tight supplies also affected diesel prices during the harvest season. Refinery outages in California, both scheduled and unscheduled, tightened inventories, and drove prices higher in markets throughout the state. The Los Angeles spot market price for the regular grade of CARB-standard gasoline rose to 95.0 cents per gallon at the close of October, while prices in the San Francisco area saw the same sort of increase following refinery

Figure HL1. Crude Oil and Petroleum Product Wholesale Prices



Sources: Energy Information Administration. Crude oil refiner acquisition cost: Form EIA-14, "Refiners' Monthly Cost Report"; petroleum product prices: Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

Table HL1. U.S. Refiner Prices and Volumes of Petroleum Products

(Prices: Cents per Gallon Excluding Taxes, Volumes: Million Gallons per Day)

Products	Sales to End Users						Sales for Resale					
	October 2002		September 2002		October 2001		October 2002		September 2002		October 2001	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
Motor Gasoline	104.0	63.3	100.2	62.3	89.9	60.9	93.1	313.9	88.9	303.5	74.0	308.2
Conventional	103.1	36.1	97.3	36.2	85.1	35.2	91.3	208.8	85.8	201.6	69.2	200.5
Regular	100.3	27.7	94.2	27.5	81.7	26.9	89.8	170.6	84.1	164.7	67.6	163.6
Midgrade	108.9	4.7	103.3	4.8	92.5	4.4	95.7	12.2	90.2	11.5	73.4	11.7
Premium	116.9	3.8	111.4	3.9	100.7	3.8	99.4	26.0	94.7	25.4	77.0	25.2
Oxygenated	108.2	3.0	102.7	2.2	97.8	3.3	96.6	11.2	93.4	8.4	85.4	10.9
Regular	104.6	2.3	99.9	1.8	94.3	2.6	94.8	8.6	91.9	6.5	84.4	8.6
Midgrade	118.1	0.4	110.7	0.2	105.9	0.4	100.0	1.4	95.3	1.2	83.5	1.3
Premium	124.7	0.3	119.1	0.2	116.2	0.3	105.7	1.1	103.4	0.7	96.0	1.0
Reformulated	104.9	24.2	104.3	23.9	96.4	22.4	96.6	93.9	95.1	93.4	82.6	96.8
Regular	100.7	17.4	100.1	17.1	92.2	16.1	93.6	69.9	92.0	70.1	79.4	72.9
Midgrade	111.5	3.2	111.1	3.3	103.1	3.1	102.0	7.0	102.4	7.5	90.5	8.0
Premium	118.8	3.6	118.6	3.5	111.3	3.2	106.9	17.0	105.4	15.8	93.3	16.0
Aviation Gasoline	140.3	0.1	139.1	0.1	125.3	0.1	123.0	0.7	119.2	0.7	109.7	0.6
Kerosene-Type Jet Fuel	84.6	49.4	82.8	49.7	67.5	45.4	83.6	12.5	81.6	13.7	67.8	16.1
Propane (Consumer Grade)	47.1	2.5	46.9	2.3	44.7	4.9	48.8	36.7	47.0	27.5	46.0	38.2
Kerosene	110.2	0.1	NA	0.0	94.2	0.1	88.6	2.2	87.4	1.2	73.1	2.3
No. 1 Distillate	98.1	0.3	93.4	0.2	87.7	0.3	97.5	1.4	95.2	0.6	84.8	1.4
No. 2 Distillate	88.3	22.6	86.1	21.5	76.6	26.1	84.4	129.9	82.8	122.7	70.8	130.4
No. 2 Fuel Oil	81.8	3.0	81.8	2.5	72.4	3.3	79.6	22.9	78.3	20.0	68.2	22.2
No. 2 Diesel Fuel	89.3	19.6	86.7	19.0	77.2	22.9	85.5	107.1	83.6	102.8	71.3	108.2
Low Sulfur	91.8	13.7	88.9	12.9	78.8	15.4	86.0	95.2	84.1	91.6	71.7	95.8
High Sulfur	83.4	5.9	81.9	6.1	73.8	7.4	80.9	11.9	79.8	11.1	68.8	12.5
No. 4 Fuel^a	72.0	0.2	71.0	0.2	56.6	0.3	72.0	0.2	68.9	0.0	63.4	0.1
Residual Fuel Oil	65.8	9.7	63.8	9.9	49.2	11.1	60.7	8.7	58.5	7.4	42.4	9.0
Sulfur Content not > 1 %	72.7	2.3	67.8	2.3	59.2	2.3	64.5	5.2	60.1	4.2	44.8	4.4
Sulfur Content > 1 %	63.6	7.4	62.6	7.5	46.6	8.8	55.0	3.4	56.3	3.2	40.0	4.6

NA = Not available.

^a Includes No. 4 fuel oil and No. 4 diesel fuel.

Notes: Motor gasoline averages and totals prior to October 1993 include leaded gasoline.

Notes: Values shown for the current month are preliminary. Values shown for previous months are revised. Data are final upon publication in the *Petroleum Marketing Annual*.

Source: Energy Information Administration Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

outages in that area. While gasoline prices in East Coast markets also rose, they were not as volatile as those seen in other regions, due in part to imports from European markets.

Additional October market and sales activity for crude oil and the principal petroleum products are summarized in the following sections.

Crude Oil

At Cushing, Oklahoma, the daily spot price for West Texas Intermediate (WTI) crude oil declined gradually during October, as a result of rising stocks and lower demand stemming from reduced refinery activity. Af-

ter opening at \$30.59 per barrel, the price marked the month's high at \$30.71 per barrel on October 1. Easing gradually after that, the price reached its low of \$26.81 per barrel on October 29 based on expectations that weekly stocks reports would show sizable growth in inventory levels. Closing the month at \$27.18 per barrel, the price was \$3.41 lower than where it started October.

- October monthly average crude oil prices decreased in all sales categories. The average domestic crude oil first purchase price fell 79 cents (3.0 percent), to \$25.29 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil declined \$1.67 (6.5 percent), to \$24.15 per barrel. The average landed cost of foreign crude oil fell \$1.16 (4.3 percent), to \$25.59 per barrel.

- The average refiner acquisition cost for domestic crude oil dropped 61 cents (2.1 percent), to \$27.82 per barrel. The average cost of imported crude oil to U.S. refiners declined \$1.15 (4.2 percent), to \$25.99 per barrel. The composite refiner acquisition cost for crude oil fell 98 cents (3.5 percent), to \$26.70 per barrel.

Petroleum Products

Motor Gasoline

Due to higher demand and lower product stock levels, the October daily spot price for regular gasoline at New York Harbor did not follow the general downward trend seen in other products' prices. Opening at 79.7 cents per gallon, the price immediately reached its high of 81.1 cents per gallon on October 1, spurred by the risk of Hurricane Lili making landfall along the Gulf Coast. The price retreated as the threat of major storm damage receded during the next several days. However, the price began to rise as supply shortfalls became evident, particularly in the mid-section of the country. The price reached its high of 85.9 cents per gallon on October 18, after which it dropped sharply in what was seen as a market correction. The price closed October at essentially the same level where it opened the month.

- National average gasoline prices rose firmly in October. The average price for retail sales of motor gasoline by refiners increased 3.8 cents to \$1.040 per gallon. The average wholesale price rose 4.2 cents to 93.1 cents per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets climbed 5.0 cents to \$1.047 per gallon. The average wholesale price increased 4.4 cents to 93.2 cents per gallon. The average dealer tank wagon (DTW) price rose 3.0 cents to 96.9 cents per gallon, while the average rack price climbed 5.3 cents to 92.9 cents per gallon. The average price for bulk sales rose 3.9 cents to 83.6 cents per gallon. Reformulated gasoline (RFG) prices were 2.2 cents higher than conventional gasoline prices at retail, and 4.0 cents more at wholesale. Oxygenated gasoline prices were 7.7 cents more than conventional gasoline prices at retail, and 6.1 cents higher at wholesale.
- Refiner motor gasoline sales generally increased in October. Total sales rose 11.4 million gallons per day (3.1 percent), to an average of 377.2 million gallons

per day. Retail sales increased 1.0 million gallons per day (1.6 percent), while wholesales rose 10.4 million gallons per day (3.4 percent). Rack sales accounted for 65.2 percent of wholesales, while DTW and bulk sales made up 21.2 percent and 13.5 percent, respectively. Reformulated gasoline constituted 31.3 percent of total motor gasoline sales, while oxygenated gasoline accounted for 3.8 percent of sales.

No. 2 Distillate

The daily spot price for No. 2 heating oil at New York Harbor dropped slightly over the course of October. Opening at 79.2 cents per gallon, the price arrived at the month's high of 81.1 cents per gallon on October 1. Falling slowly after that point, the price reached its low of 70.6 cents per gallon on October 29, just before release of industry supply reports. The price closed October at 74.5 cents per gallon, 4.7 cents lower than where it began the month.

- No. 2 distillate prices increased during October. The national average residential sales price for No. 2 distillate rose 4.5 cents to \$1.144 per gallon. The average wholesale price increased 1.6 cents to 85.0 cents per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets rose 4.5 cents, while the average No. 2 diesel fuel wholesale price increased 1.9 cents. The difference between low- and high-sulfur diesel fuel prices was 1.9 cents at retail and 4.0 cents at wholesale.
- Refiner sales of No. 2 distillate climbed in October. Total sales rose 8.3 million gallons (5.8 percent), to 152.6 million gallons per day. Sales of No. 2 fuel oil increased 3.4 million gallons per day (15.1 percent), while sales of No. 2 diesel fuel rose 4.9 million gallons per day (4.0 percent). Low-sulfur diesel fuel accounted for 86.0 percent of all refiner diesel fuel sales, and 71.4 percent of all refiner No. 2 distillate sales.

Residual Fuel Oil

- October residual fuel oil prices generally increased from September levels. Refiner prices for low-sulfur residual fuel oil rose 4.9 cents to 72.7 cents per gallon at retail, and at wholesale, the average price rose 4.4 cents to 64.5 cents per gallon. The average retail price for high-sulfur residual fuel oil increased 1.0 cent to 63.6 cents per gallon, while the wholesale price fell 1.3 cents to 55.0 cents per gallon. Including

data reported by a sample of residual fuel oil marketers, the average low-sulfur residual fuel oil price climbed 3.7 cents to 66.9 cents per gallon at retail, while the wholesale price increased 2.5 cents to 63.4 cents per gallon. The retail price for high-sulfur residual fuel oil rose 1.2 cents to 63.5 cents per gallon, while the wholesale price declined 1.3 cents to 55.7 cents per gallon.

- Refiner sales of residual fuel oil increased moderately in October. Total sales climbed 1.1 million gallons per day (6.4 percent) to 18.4 million gallons per day. Low-sulfur residual fuel sales rose 1.0 million gallons (15.4 percent), while high-sulfur residual fuel oil sales inched up 100,000 gallons (0.9 percent).

Other Products

- Prices for products included in this section largely rose in October. Refiner propane prices increased 0.2 cent per gallon at retail, and 1.8 cents per gallon at wholesale. Including data from a sample of propane marketers, the average residential propane price climbed 5.1 cents per gallon, while the average retail price rose 1.1 cents. The average wholesale propane price increased 1.6 cents. Prices for kerosene-type jet fuel, aviation gasoline, kerosene, No. 1 distillate, and No. 4 distillate rose at both levels.
- Refiner sales of these products mostly increased in October. Sales of propane, kerosene, No. 1 distillate, No. 4 distillate rose at both the retail and wholesale levels. Kerosene-type jet fuel sales declined at both levels, while sales of aviation gasoline fell at retail and rose at wholesale.